Under the Paperwork Reduction Act of 1995,	to persons are required to respond to a collection of information unless it o	contains a valid OMB control number	
Substitute for form 1449A/PTO .		Complete if Known	
STAT	RMATION DISCLOSURE EMENT BY APPLICANT as many sheets as necessary)	Application Number	09/544,045
P FEB 1 5 2001 (USE) as Hearly sheets as necessary)		Filing Date	April 6, 2000
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		First Named Inventor	Brian Lee Sauer
\$ 70		Group Art Unit	1643
ADEMAN		Examiner Name	
Sheet 1	of 17	Attorney Docket Number	OMRF 178

			U.S. PATENT DOCU	MENTS	
Examiner Initials*	Cite No.1	US Patent Document Number Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		4,959,317	Sauer	09-25-1990	
		5,300,431	Pierce et al.	04-05-1994	
		5,334,515	Rashtchian et al.	08-02-1994	
		5,354,668	Auerbach	10-11-1994	
		5,378,618	Sternberg et al.	01-03-1995	
		5,434,066	Bebee et al.	07-18-1995	
		5,441,884	Baum	08-15-1995	
		5,478,731	Short	12-26-1995	100 100 100 100 100 100 100 100 100 100
		5,510,099	Short et al.	04-23-1996	
		5,527,695	Hodges et al.	06-18-1996	
		5,530,191	Maliga	06-25-1996	
		5,539,094	Reed et al.	07-23-1996	
		5,589,362	Bujard et al.	12-31-1996	
		5,591,609	Auerbach	01-07-1997	
		5,596,089	Silversides et al.	01-21-1997	
		5,612,205	Kay et al.	03-18-1997	
		5,614,389	Auerbach	03-25-1997	
		5,629,159	Anderson	05-13-1997	
		5,629,179	Mierendorf et al.	05-13-1997	
		5,635,381	Hooykaas et al.	06-03-1997	
		5,639,726	Lawrence et al.	06-17-1997	
		5,641,748	Hsu	06-24-1997	
		5,641,866	Reed et al.	06-24-1997	
		5,643,727	Reed et al.	07-01-1997	
		5,650,298	Bujard et al.	07-22-1997	***************************************
		5,650,308	Baum	07-22-1997	
		5,650,491	Reed et al.	07-22-1997	

Examine	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SENT TO: Assistant Commission for Patent, Washington, DC 20231.

1325421v1

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside	this bex →
------------------------------------	------------

PTO:SB.08A (10-98 Approved for use through 10/31/99, OMB 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it Substitute for form 1449A/PTO		nplete if Known	
INFORMATION DISCLOSURE O STATEMENT BY APPLICANT (USA) as many sheets as necessary)	Application Number	09/544,045	•
AT FEB 1 5 2001 (2)	Filing Date	April 6, 2000	
(a) 1 5 2007 ts	First Named Inventor	Brian Lee Sauer	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Group Art Unit	1643	-
Sheet of 17	Examiner Name		
Sheet of 17	Attorney Docket Number	OMRF 178	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	US Patent Document	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
		5,654,168	Bujard et al.	08-05-1997	
		5,654,182	Wahl et al.	08-05-1997	
		5,656,438	Hsu	08-12-1997	
		5,658,772	Odell et al.	08-19-1997	
		5,677,177	Wahi et al.	10-14-1997	
		5,679,523	Li et al.	10-21-1997	
		5,686,595	Reed et al.	11-11-1997	
		5,700,470	Saito et al.	12 23 1997	
		5,721,118	Scheffler	02-24-1998	
		5,721,367	Kay et al.	02-24-1998	
		5,723,287	Russell et al.	03-03-1998	
		5,723,333	Levine et al.	03-03-1998	
		5,723,765	Oliver et al.	03-03-1998	
		5,731,182	Boyce	03-24-1998	
		5,733,733	Auerbach	03-31-1998	
		5,733,743	Johnson et al.	03-31-1998	
		5,733,744	Hamilton	03-31-1998	
		5,736,377	Band	04-07-1998	
		5,744,336	Hodges et al.	04-28-1998	
		5,744,343	Draetta et al.	04-28-1998	
		5,756,671	Gyuris et al.	05-26-1998	
		5,763,240	Zarling et al.	06-09-1998	
		5,767,376	Stiles et al	06-16-1998	
		5,770,384	Androphy et al.	06-23-1998	<u> </u>
_		5,773,697	Tomes et al.	05-30-1998	
		5,776,449	Baum	07-07-1998	

IEvamina I	Data I
1 ' ' 1	Date
Signature C	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

	Substitute for form 1449A/PTO	Complete if Known	
	INFORMATION DISCLOSURE O / A STATEMENT BY APPLICANT (use as many sheets as necessary)	Application Number	09/544,045
Ą	FEB 1 5 2001 (2)	Filing Date	April 6, 2000
1	<i>I</i>	First Named Inventor	Brian Lee Sauer
1	k	Group Art Unit	1643
Ì	Show ADEMARK OF 17	Examiner Name	
1	Sheet 3 of 17	Attorney Docket Number	OMRF 178

			U.S. PATENT DOCU	MENTS	
Examiner Initials*	Cite No.¹	US Patent Document Number Kind Code	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		(if known)		
		5,777,194	Scott et al.	07-07-1998	
		5,789,156	Bujard et al.	08-04-1998	
		5,792,632	Dujon et al.	08-11-1998	
		5,792,833	Androphy et al.	08-11-1998	
		5,795,726	Glucksmann	08-18-1998	
		5,795,734	Flanagan et al.	08-18-1998	
		5,800,998	Glucksmann	09-01-1998	
		5,801,030	McVey et al.	09-01-1998	
		5,807,708	Falb et al.	09-15-1998	
		5,807,995	Cohen et al.	09-15-1998	
1		5,814,300	Scott et al.	09-29-1998	
		5,814,500	Dietz	09-29-1998	
		5,814,618	Bujard et al.	09-29-1998	
		5,817,492	Saito et al.	10-06-1998	
		5,830,461	Billiar et al.	11-03-1998	
İ		5,830,698	Reff et al.	11-03-1998	
		5,830,729	Jaisser et al.	11-03-1998	
Ì		5,834,202	Auerbach	11-10-1998	
		5,837,242	Holliger et al.	11-17-1998	
		5,837,844	Hsu	11-17-1998	
		5,840,540	St. George-Hyslop et al.435/69.1	11-24-1998	
		5,843,694	Band	121-1998	
		5,843,742	Natsoulis et al.	12-01-1998	
		5,843,744	Baum	12-01-1998	
		5,844,079	Ingham et al.	12-01-1998	
		5,849,553	Anderson et al.	12-15-1998	

Examine	Date	
Signature	Consideration	dered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

PTO/SB/08A (10-98
Approved for use through 10/31/99. OMB 0651-0031
Petent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information un	ess it contains a va5d OMB control number	
Substitute for form 1449A/PTO	Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT Susse as many sheets as necessary)	Application Number	09/544,045
FEB 1 5 2001 2001	Filing Date	April 6, 2000
I\~	First Named Inventor	Brian Lee Sauer
The cutty	Group Art Unit	1643
THE MARK OFFICE	Examiner Name	
Sheet 4 of 17	Attorney Docket Number	OMRF 178

			U.S. PATENT DOCUI	MENTS	
Examiner Initials*	Cite No.¹	US Patent Document	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code (if known			
		5,849,571	Glorioso et al.	12-15-1998	
		5,849,572	Glorioso et al.	12-15-1998	
		5,849,708	Maratos-Flier	12-15-1998	
		5,849,989	Edlund	12-15-1998	
		5,849,995	Hayden et al.	12-15-1998	
		5,851,808	Elledge et al.	12-22-1998	
		5,854,067	Newgard et al.	12-29-1998	
		5,858,657	Winter et al.	01-12-1999	
		5,859,310	Bujard et al.	01-12-1999	
		5,866,361	Dujon et al.	02-02-1999	
		5,866,755	Bujard et al.	02-02-1999	
		5,871,907	Winter et al.	02-16-1999	
		5,877,400	Tomes et al.	03-02-1999	
		5,882,888	Jogensen	03-16-1999	
		5,882,893	Goodearl	03-16-1999	
		5,885,776	Stone et al.	03-23-1999	
		5,885,779	Sadowski et al.	03-23-1998	
		5,885,793	Griffiths et al.	03-23-1999	
		5,885,836	Wahl et al.	03-23-1999	
		5,888,732	Hartley et al.	03-30-1999	
		5,888,981	Bujard et al.	03-30-1999	

	FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.1		Foreign Patent Docu	nent	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶		
		Office.3	Number ⁴	Kind Code ⁵ (if known)						
						Ţ i		1		

	•	•	•	•	•	•	·
Examine					Date		•
Signature					 Considered		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ⁷ See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

PTO/SB/08A (10-98
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Pape	Substitute for		required to respond to a collection of information unless it. 9A/PTO			
				Con	nplete if Known	
£ 150	ATA	TEME	TION DISCLOSURE NT BY APPLICANT ny sheets as necessary)	Application Number	09/544,045	
丰	1 5 2007 2			Filing Date	April 6, 2000	
	7			First Named Inventor	Brian Lee Sauer	
190cm	ARK OFFICE			Group Art Unit	1643	
SCM	ARKU			Examiner Name		
Sheet	5	of	17	Attorney Docket Number	OMRF 178	

	U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	US Pate	nt Docum	nent	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		Number	Kind (Code ² nown)	<u> </u>				
				=					
							-		

Examiner Initials*	Cite No.'		Foreign Patent Doo	cument		Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T°
		Office.3	Number ⁴	Kind Code ⁵ (if known)				
	•	EP	0 344 029	A1	Plant Genetic Systems, N.V.	11-29-1989		
		EP	0 332 104	A2	CIBA-GEIGY AG	09-13-1989		
		EP	0 337 532	A1	Mogen International	10-18-1989		
		wo	90/11361	A1	E. I. Du Pont de Nemours and Company	10-04-1990		

Examine	Date	
Signature	Considered	<u> </u>

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box	→
---	---

PTO/SB/DBA (10-96 Approved for use through 10/31/99. OMB 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of infor	mation unless it contains a valid OMB control number		
Substitute for form 1449A/PTO			
	Co	omplete if Known	
INFORMATION DISCLOSURE OF THE CONTROL OF THE CONTRO	Application Number	09/544,045	
	Filing Date	April 6, 2000	
3 200 (2)	First Named Inventor	Brian Lee Sauer	
(A)	Group Art Unit	1643	
A POEMARK OFFICE	Examiner Name		
Sheet 6 of 17	Attorney Docket Number	OMRF 178	

		OTHER ART NON PATENT LITERATURE DOCUMENTS	T		
Examiner's Initials*	Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the No.¹ item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published				
		ABREMSKI, et al., "Studies on the properties of P1 site-specific recombination: evidence for topologically unlinked products following recombination," Cell 32(4):1301-11 (1983).			
		ALVARADO-URBINA, et al., "Automated synthesis of gene fragments," Science 214(4518):270-4 (1981).			
		AMMERER, "Expression of genes in yeast using the ADCI promoter," Methods Enzymol. 101:192-201 (1983).			
		ANDRUS, Production of Seedless Watermelons, USDA Tech. Bull. No. 1425 (1971).			
		ANTONUCCI, et al., "Eukaryotic promoters drive gene expression in <i>Escherichia coli," J. Biol. Chem.</i> 264(30):17656-9 (1989).			
		AOKI, et al., "Efficient generation of recombinant adenoviral vectors by Cre-lox recombination in vitro," Mol. Med. 5(4):224-31 (1999).			
		BARKER, et al., "Cellular localization of soybean storage protein mRNA in transformed toacco seeds," <i>Proc. Natl. Acad. Sci.</i> 85:458-462 (1988).			
		BARNES & RINE, "Regulated expression of endonuclease EcoRI in Saccharomyces cerevisiae: nuclear entry and biological consequences," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 82(5):1354-8 (1985).			
		BEACHY, et al., "Accumulation and assembly of soybean -conglycinin in seeds of transformed petunia plants," <i>EMBO</i> J 4:3047-3053 (1985).			
		BERLIN & SAUER, "In situ color detection of alpha-L-arabinofuranosidase, a "no-background" reporter gene, with 5-bromo-3-indolylL-arabinofuranoside," Anal. Biochem. 243(1):171-5 (1996).			

Examiner's	Date	
	1	
Signature	l ICons	idered I
	1	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type	a nbrs	sion (-) inside this box →

PTOISS.DBA (10-98 Approved for use through 10/31/99, OMB 0651-0031 Petent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information	on unless it contains a valid OMB control number	
Substitute for form 1449A/PTO		
<u> </u>	Co	mplete if Known
INFORMATION DISCLOSURE	Application Number	09/544,045
OSTATEMENT BY APPLICANT (tise as many sheets as necessary)		
	Filing Date	April 6, 2000
图 5200 至	First Named Inventor	Brian Lee Sauer
/ p	Group Art Unit	1643
PADE. OFFICE	Examiner Name	
Sheet MARK of 17	Attorney Docket Number	OMRF 178

		OTHER ART NON PATENT LITERATURE DOCUMENTS	T 72			
Examiner's Initials*	Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the No. ¹ item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published					
		BLOCHLINGER & DIGGELMANN, "Hygromycin B phosphotransferase as a selectable marker for DNA transfer experiments with higher eucaryotic cells," <i>Mol. Cell. Biol.</i> 4(12):2929-31 (1984).				
		BRINK & COOPER, "The endosperm in seed development," Bot. Rev. 8:423-541 (1947).				
		BROGLIE, et al., "Functional analysis of DNA sequences responsible for ethylene regulation of a bean chitinase gene in transgenic tobacco," <i>Plant Cell.</i> 1(6):599-607 (1989).				
		CHALFIE, et al., "Green fluorescent protein as a marker for gene expression," Science 263(5148):802-5 (1994).	_			
		CHEN, et al., "A DNA sequence that confers seed-specific enhancement to a constitutive promoter," <i>EMBO J</i> 7(2):297-302 (1988).				
		CHEN, et al., "Functional analysis of box 1 mutations in yeast site-specific recombinases Flp and R: pairwise complementation with recombinase variants lacking the active-site tyrosine," <i>Molecular and Cellular Biology</i> 12(9):3757-3765 (1992).				
		CHEN, et al., "Functional analysis of regulatory elements in a plant embryo-specific gene," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 83(22):8560-4 (1986).				
		CHEN, et al., "Regulated expression of genes encoding soybean beta-conglycinins in transgenic plants," Dev. Genet. 10(2):112-22 (1989).				
	-	COLOT, et al., "Localization of sequences in wheat endosperm protein genes which confer tissue-specific expression in tobacco," <i>EMBO J</i> 6: 3559-3564 (1987).				
		CORMACK, et al., "FACS-optimized mutants of the green fluorescent protein (GFP)," Gene173(1 Spec No):33-8 (1996).				

Examiner's	 Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box -	→	
---	----------	--

PTO:S8:08.A (10:96 Approved for use through 10/31/99. OMB 0851-0031 Petent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Otaler time raper	Substitute for			ion umbass it contains a valid OMB control number			
ļ	Substitute 101	10//// 14-		Co	Complete if Known		
0 1	SXATE	MENT	N DISCLOSURE BY APPLICANT	Application Number	09/544,045		
PATENT &	/ s (use)	as many s	heets as necessary)	Filing Date	April 6, 2000		
√G.	5 2007 \$			First Named Inventor	Brian Lee Sauer		
A DEMARK OFFICE				Group Art Unit	1643		
TOEM	ARK OFFICE			Examiner Name			
Sheet	T 8	of	17	Attorney Docket Number	OMRF 178		

		OTHER ART NON PATENT LITERATURE DOCUMENTS	T²					
Examiner's Initials*	No.' item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published							
	-	CRAIG, "The mechanism of conservative site-specific recombination," Annu. Rev. Genet. 22:77-105 (1988).						
		DEPICKER, et al., "Nopaline synthase: transcript mapping and DNA sequence," J. Mol. Appl. Genet.1(6):561-73 (1982).						
	_	DIAZ, et al., "The prokaryotic beta-recombinase catalyzes site-specific recombination in mammalian cells," J. Biol. Chem. 274(10):6634-40 (1999).						
		DUNSMUIR, et al., "The major chlorophyll a/b binding protein of petunia is composed of several polypeptides encoded						
		by a number of distinct nuclear genes," J. Mol. Appl. Genet. 2(3):285-300 (1983).						
		FISCH, et al., "A strategy of exon shuffling for making large peptide repertoires displayed on filamentous bacteriophage," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 93(15):7761-66 (1996).						
		GAGNETEN, et al., "Brief expression of a GFPcre fusion gene in embyonic stem cells allows rapid retrieval of sire-specific genomic deletions," <i>Nucleic Acids Research</i> 25(16):3326-3331 (1997).						
		GOLDBERG, et al., "Regulation of gene expression during plant embryogenesis," Cell 56(2):149-60 (1989).						
		GORMAN, et al., "High efficiency DNA-mediated transformation of primate cells," Science 221(4610):551-3 (1983).						
•		GORMAN, et al., "The Rous sarcoma virus long terminal repeat is a strong promoter when introduced into a variety of eukaryotic cells by DNA-mediated transfection," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 79(22):6777-81 (1982).						
		GUO, et al., "Structure of Cre recombinase complexed with DNA in a site-specific recombination synapse," Nature 389(6646):40-6 (1997).						

Examiner's	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

kasa type a	plus sign ((+) înside	this bea	→
-------------	-------------	------------	----------	---

PTO:SS:08A (10-96 Approved for use through 10/31/99. OMB 0651-0331 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Papery	work Reduction Act of 199	i, no persons e	re required to respond to a collection of informat	ion unless it contains a valid OMB control number		
	Substitute for	form 14	49A/PTO	Co	omplete if Known	
					Windle IV Work	
PAITENT	STATE	MENT	ON DISCLOSURE BY APPLICANT sheets as necessary)	Application Number	09/544,045	
3	7 5 2007 E	;		Filing Date	April 6, 2000	
		i		First Named Inventor	Brian Lee Sauer	
POFMARK OFFICE				Group Art Unit	1643	
~~~	MARK OFF			Examiner Name		
Sheet	9	of	17	Attorney Docket Number	OMRF 178	

		OTHER ART NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	T		
Examiner's Initials*	······································				
		GURLEY, et al., "Upstream sequences required for efficient expression of a soybean heat shock gene," <i>Mol. Cell. Biol.</i> 6(2):559-65 (1986).			
		GUZMAN, et al., "Tight regulation, modulation, and high-level expression by vectors containing the arabinose PBAD promoter," J. Bacteriol. 177(14):4121-30 (1995).			
		HAGAN & GUILFOYLE, "Rapid induction of selective transcription by auxins," Mol. Cell. Biol. 5(6):1197-203 (1985).			
		HALLET, et al., "Transposition and site-specific recombination: adapting DNA cut-and-paste mechanisms to a variety	_		
		of genetic rearrangements," FEMS Microbiol. Rev. 21(2):157-78 (1997).			
		HARTUNG & KISTERS-WOIKE, "Cre mutants with altered DNA binding properties," J Biol Chem 273(36):22884- 22891 (1998).			
		HENDERSON, "Effect of cultivar, polyploidy and 'reciprical' hybrodization on charcters important in breeding triploid seedless watermelon hybrids," <i>J. Amer. Soc. Hort. Sci.</i> 102:293-297 (1977).			
		HIGGINS, et al., "Synthesis and regulation of major proteins in seeds," Ann. Rev. Plant Physiol. 35:191-221 (1984).			
		HIGGINS, et al., "The sequence of a pea vicilin gene and its expression in transgenic tobacco plants," Plant Mol. Biol. 11:109-123 (1988).			
		HOESS, et al., "Isolation and characterization of intermediates in site-specific recombination," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 84(19):6840-4 (1987).			
		HOESS, et al., "P1 site-specific recombination: nucleotide sequence of the recombining sites," Proc. Natl. Acad. Sci. U. S. A. 79(11):3398-402 (1982).			

	<del></del>		
		la .	
Examiner's		Date	
le:		Considered	
Signature		Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Under the Paper				on unless it contains a valid OMB control number		
<del> </del>	Substitute for	form 144	9A/PTO		omplete if Known	
PATENT	SKATE	MENT	N DISCLOSURE BY APPLICANT eets as necessary)	Application Number	09/544,045	
	5 30 0			Filing Date	April 6, 2000	
Sp.	5 2001 2			First Named Inventor	Brian Lee Sauer	
1/200	/ريخ			Group Art Unit	1643	
EMA	ARK OFFICE			Examiner Name		
Sheet	10	of	17	Attorney Docket Number	OMRF 178	

<del> </del>		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	Ť
Examiner's Initials*	Cite No.1	item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
		HOESS, et al., "The role of the loxP spacer region in P1 site-specific recombination," Nucleic Acids Res. 14(5):2287-300 (1986).	
		HOFFMAN, et al., "A modified storage protein is synthesized, processed, and degraded in the seeds of transgenic plants," <i>Plant Mol. Biol.</i> 11:717-729 (1988).	
		HOFFMAN, et al., Synthesis and protein body deposition of maize 15-kd zein in transgenic tobacco seeds," <i>EMBO J</i> 6:3213-3221 (1987).	
		*HORSCH, et al., Science, 227: 1229-1231 (1985).	
		HSU, et al., "Concentrations of sucrose and nitrogenous compounds in the apoplast of developing soybean seed coats and embryos," <i>Plant Physiol.</i> 75:181 (1984).	
		*ITO, et al., "Solid phase synthesis of polynucleotides. VI. Further studies on polystyrene copolymers for the solid support," Nucleic Acids Res. 10(5):1755-69 (1982).	
	-	JAYARAM, "Two-micrometer circle site-specific recombination: the minimal substrate and the possible role of flanking sequences," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 82(17):5875-9 (1985).	
		JOHNSTON & DAVIS, "Sequences that regulate the divergent GAL1-GAL10 promoter in Saccharomyces cerevisiae," Mol. Cell. Biol. 4(8):1440-48 (1984).	
		KIHARA, "Triploid Watermelons," Proc. Soc. Hort. Sci. 58:217-230 (1951).	
		*KILBY, et al., "Site-specific recombinases: tools for genome engineering," Trends Genet. 9(12):413-21 (1993).	

Examiner's	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+	) inside	this box	<b>→</b>
----------------------------	----------	----------	----------

PTO:SB/08A (10-98 Approved for use through 10/31/99, 0MB 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of informati Substitute for form 1449A/PTO	T	omplete if Known	·
STATEMENT BY APPLICANT  (use as many sheets as necessary)	Application Number	09/544,045	
15 m 5	Filing Date	April 6, 2000	
1\p \\ \p' \ \ \p' \ \ \ \ \ \ \ \ \ \ \	First Named Inventor	Brian Lee Sauer	
1 By chil	Group Art Unit	1643	
PROFMARK OFFICE	Examiner Name		
Sheet 11 of 17	Attorney Docket Number	OMRF 178	

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
		KÜHN et al., "Inducible gene targeting in mice," Science 269(5229):1427-9 (1995).	
		LAKSO, et al., "Targeted oncogene activation by site-specific recombination in transgenic mice," Proc. Natl. Acad. Sci. U. S. A. 89(14):6232-6 (1992).	
		LEE & SAITO, "Role of nucleotide sequences of loxP spacer region in Cre-mediated recombination," Gene 216(1):55-65 (1998).	
		LIEBKE, et al., "The sequence of the distal end of the E. coli ribosomal RNA rrnE operon indicates conserved features	
		are shared by rrn operons," Nucleic Acids Res. 13(15):5515-25 (1985).	
		MARCOTTE ,et al., "Regulation of a wheat promoter by abscisic acid in rice protoplasts," <i>Nature</i> 335:454-457 (1988).	
	.—	MARRIS, et al., "The 5' finaking region of a barley B hordein gene controls tissue and developmental specific CAT expression in tobacco plants," <i>Plant Mol. Biol.</i> 10:359-366 (1988).	
		*MAYNARD, Hort. Sci., 24: 603-604 (1989).	
		MAZUR & CHUI, "Sequence of a genomic DNA clone for the small subunit of ribulose bis-phosphate carboxylase-oxygenase from tobacco," <i>Nucleic Acids Res.</i> 13(7):2373-86 (1985).	
	<u>-</u>	METZGER, et al., "Conditional site-specific recombination in mammalian cells using a ligand-dependent chimeric Cre recombinase," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 92(15):6991-5 (1995).	
		MIYADA, et al., "Regulation of the araC gene of Escherichia coli: catabolite repression, autoregulation, and effect on araBAD expression," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 81(13):4120-4 (1984).	

Examiner's	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please	typs a	phis	sign	(+)	inside	this	box	<b>-</b>
--------	--------	------	------	-----	--------	------	-----	----------

PTO/SB/08A (10:96 Approved for use through 10/31/99, OMB 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

ļ	Substitute for	form 144	19A/PTO 	C	omplete if Known	
FED	<b>*</b>		N DISCLOSURE BY APPLICANT	Application Number	09/544,045	····
4 ′	Say 7	•	•	Filing Date	April 6, 2000	
\$				First Named Inventor	Brian Lee Sauer	
RADEMA	CEICH			Group Art Unit	1643	
EMA	RKU			Examiner Name		
Sheet	12	of	17	Attorney Docket Number	OMRF 178	

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Ť
		MONDRAGON, "Unraveling transposition: gamma delta resolvase in complex with DNA," Structure 3(8):755-8 (1995).	
		MULLINS, et al., "Efficient Cre-lox linearisation of BACs: applications to physical mapping and generation of transgenic animals," <i>Nucleic Acids Res.</i> 25(12):2539-40 (1997).	
		NAITO, et al., "Differential expression of conglycinin ' and ' subunit genes in trasngenic plants," <i>Plant Mol. Biol.</i> 11:683-695 (1988).	
		NEWBIGIN, et al., "Pea convicilin: structure and primary sequence of the protein and expression of a gene in the	T
		seeds of trasgenic tobacco," <i>Planta</i> 180:461 (1990).	Т
		NUNES-DÖBY et al., "Similarities and differences among 105 members of the Int family of site-specific recombinases," Nucleic Acids Res. 26(2):391-406 (1998).	-
		ODELL, et al., "Identification of DNA sequences required for activity of the cauliflower mosaic virus 35S promoter," Nature 313(6005):810-2 (1985).	
		OFFLER & PATRICK, "Cellular structures, plasma membrane surface areas and plasmodesmatal frequencies of seed coats of <i>Phaseolus vulgaris</i> L. in relation to photosynthate transfer," <i>Aust. J. Plant Physiol.</i> 11:79 (1984).	
		OKAMURO, et al., Soybean seed lectin gene and flanking nonseed protein genes are developmentally regulated in transformed tobacco plants," Proc. Natl. Acad. Sci. U. S. A. 83(21):8240-4 (1986).	
-		ORAM, et al., "Recombination. Pieces of the site-specific recombination puzzle," Curr. Biol. 5(10):1106-9 (1995).	
		PADDON & HARTLEY, "Expression of <i>Bacillus amyloliquefaciens</i> extracellular ribonuclease (barnase) in <i>Escherichia coli</i> following an inactivating mutation," <i>Gene</i> 53(1):11-9 (1987).	+

Examiner's	<u> </u>	Date	
Signature		Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (-	• ) inside this bax →
----------------------------	-----------------------

PTC/SB/08A (10-98 Approved for use through 10/31/99. OMB 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

1 :	Substitute for	form 1449A	PTO			
				C	omplete if Known	
I	_					
y 01	PINFOR	MATION	DISCLOSURE	Application Number	09/544,045	
1	STATE	MENT BY	APPLICANT			
-						
FEB 1 5	<i>2001</i>	as many sheet	s as necessary)			
	4			Filing Date	April 6, 2000	
<b>P</b>	attice.			First Named Inventor	Brian Lee Sauer	
PADEMA	RKO			Group Art Unit	1643	
				Examiner Name		
Sheet	13	of	17	Attorney Docket Number	OMRF 178	

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
		PAN, et al., "Mechanism of cleavage and ligation by FLP recombinase: classification of mutations in FLP protein by in vitro complementation analysis," <i>Molecular and Cellular Biology</i> 13(6):3167-3175 (1993).	
		PARSONS, et al., "Functional analysis of Arg-308 mutants of Flp recombinase," <i>J Biol Chem</i> 265:4527-4533 (1990).	
		PATRICK, "Photosynthate unloading from seed coats of Phaseolus vulgaris L. control by tisue water relations," <i>J. Plant Physiol.</i> 115: 297 (1984).	
		PATRICK, "Sieve element unloading: cellular pathway, mechanism and control," <i>Physiol. Plant</i> 78: 298 (1990).	
		PAVLAKIS & HAMER, "Regulation of a metallothionein-growth hormone hybrid gene in bovine papilloma virus," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 80(2):397-401 (1983).	
		PEREZ-GRAU & GOLDBERG, "Soybean seed protein genes are regulated spatially during embryogenesis," Plant Cell 1:1095-1109 (1989).	
		RADKE, et al., "Transformation of <i>Brassica napus</i> L. using <i>Agrobacterium tumefaciens</i> : developmentally regulated expression of a reintroduced napin gene," <i>Theor. Appl. Genet.</i> 75:685-694 (1988).	
		RIGGS, et al., "Utilization of luciferase fusion genes to monitor differential regualtion of phytohemagglutinin and phaseolin promotes in transgenic tobacco," <i>Plant Sci.</i> 63:47-57 (1989).	
		SAMBROOK et al., Cold Spring Harbor, New York: Cold Spring Harbor Laboratory Press (Second Edition) (1989).	
		SANFORD, The biolistic process," Tibtech 6:299-302 (1988).	

Examiner's	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ² Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please	type :	n obre	einn	1+1	inside	this	hox	-

PTOISE/DBA (10-96 Approved for use through 10/31/99, OMB 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

	Under the Paperw	ork Reduction Act of 199	75, no persons are	required to respond to a collection of informati	on unless it contains a valid OMB control number		
- [		Substitute for	form 144	I9A/PTO	_		
_					Co	omplete if Known	
		) STATE	MENT	N DISCLOSURE BY APPLICANT	Application Number	09/544,045	
PAIEN	rt8 1	5 2007 2		note de modebal yy	Filing Date	April 6, 2000	
1.1	Γ.	/			First Named Inventor	Brian Lee Sauer	
Ч	۶ که.	. est./			Group Art Unit	1643	
	POEMA	RK OFFICE			Examiner Name		
i	Sheet	14	of	17	Attorney Docket Number	OMRF 178	

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
		SANO & CANTOR, "Expression of a cloned streptavidin gene in <i>Escherichia coli</i> ," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 87(1):142-6 (1990).	
		SAUER & HENDERSON, "Cre-stimulated recombination at loxP-containing DNA sequences placed into the mammalian genome," Nucleic Acids Res. 17(1):147-61 (1989).	
· · · · · · · · · · · · · · · · · · ·		SAUER & HENDERSON, "Site-specific DNA recombination in mammalian cells by the Cre recombinase of bacteriophage P1," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 85(14):5166-70 (1988).	
		SAUER & HENDERSON, "Targeted insertion of exogenous DNA into the eukaryotic genome by the Cre recombinase,"	_
		New Biol. 2(5):441-9 (1990).	
		SAUER, "Identification of cryptic lox sites in the yeast genome by selection of Cre-mediated chromosome translocations that confer multiple drug resistance," <i>J. Mol. Biol.</i> , 223:911-928 (1992).	
		SAUER, "Functional expression of the <i>cre-lox</i> site-specific recombination system in the yeast <i>Saccharomyces</i> cerevisiae," Mol. Cell. Biol. 7(6):2087-96 (1987).	
		SAUER, "Inducible gene targeting in mice using the Cre/lox system," Methods 14(4):381-92 (1998).	
		SAUER, "Manipulation of transgenes by site-specific recombination: use of Cre recombinase," Methods Enzymol. 225:890-900 (1993).	
		SAUER, "Multiplex Cre/lox recombination permits selective site-specific DNA targeting to both a natural and an engineered site in the yeast genome," Nucleic Acids Res. 24(23):4608-13 (1996).	
		SAUER, et al., "Construction of isogenic cell lines expressing human and rat angiotensin II AT1 receptors by Cremediated site-specific recombination," <i>Methods</i> 4:143-149 (1992).	

Examiner's	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box	
---------------------------------------------	--

PTQISB/08A (10-98 Approved for use through 10/31/99, OMB 0851-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Papers	work Reduction Act of 1995	, no persons ar	required to respond to a collection of informat	ion unless it contains a valid OMB control number		
	Substitute for	form 144	19A/PTO	Ce	omplete if Known	
	0.4			Andination Number	09/544.045	
PATENT	STATÈ	MENT	N DISCLOSURE BY APPLICANT heets as necessary)	Application Number	09/544,045	
l\œ	.,			Filing Date	April 6, 2000	
1/3/2	MARK OFFICE			First Named Inventor	Brian Lee Sauer	
10E	MARK OF			Group Art Unit	1643	
				Examiner Name		
Sheet	15	of	17	Attorney Docket Number	OMRF 178	

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Τ,
		SAUER, et al., "Site-specific insertion of DNA into a pseudorables virus vector," <i>Proc. Natl. Acad. Sci. U. S. A.</i> 84(24):9108-12 (1987).	
		SENECOFF & COX, "Directionality in FLP protein-promoted site-specific recombination is mediated by DNA-DNA pairing," <i>J. Biol. Chem.</i> 261(16):7380-6 (1986).	
		SENECOFF, et al., "DNA recognition by the FLP recombinase of the yeast 2 mu plasmid. A mutational analysis of the FLP binding site," J. Mol. Biol. 201(2):405-21 (1988).	
		SENGUPTA-GOPLALAN, et al., "Developmentally regulated expression of the bean -phaseolin gene in tobacco seed,"	
		Proc. Natl. Acad. Sci. USA 82:3320-3324 (1985).	
		SHIRSAT, et al., "Sequences responsible for the tissue specific promoter activity of a pea legumin gene in tobacco," <i>Mol. Gen. Genet.</i> 215(2):326-31 (1989).	
		SIGAL & ALBERTS, "Genetic recombination: the nature of a crossed strand-exchange between two homologous DNA molecules," J. Mol. Biol. 71(3):789-93 (1972).	
		SOUTHERN & BERG, "Transformation of mammalian cells to antibiotic resistance with a bacterial gene under control of the SV40 early region promoter," <i>J. Mol. Appl. Genet.</i> 1(4):327-41 (1982).	
		STEMMER, "DNA shuffling by random fragmentation and reassembly: in vitro recombination for molecular evolution," Proc. Natl. Acad. Sci. U. S. A. 91(22):10747-51 (1994).	
		STEMMER, "Rapid evolution of a protein in vitro by DNA shuffling," Nature 370(6488):389-91 (1994).	
		STERNBERG & HAMILTON, "Bacteriophage P1 site-specific recombination. I. Recombination between loxP sites," J. Mol. Biol. 150(4):467-86 (1981).	-

Examiner's	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Phease	type a plus	sign (+) inside	this box ->
--------	-------------	-----------------	-------------

٠. ,

PTO:SB:08A (10-98 Approved for use through 10/31/99. OMB 0851-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paper	work Reduction Act of	1995, no persons are	required to respond to a collection of informat	ion unless it contains a valid OMB control mamber		
	Substitute f	or form 144	9A/PTO	Co	omplete if Known	
TEB , 5	STAT	EMENT	N DISCLOSURE BY APPLICANT	Application Number	09/544,045	
MARK C	FFICE			Filing Date	April 6, 2000	
1				First Named Inventor	Brian Lee Sauer	
				Group Art Unit	1643	
ļ				Examiner Name		
Sheet	16	of	17	Attorney Docket Number	OMRF 178	

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
STERNBERG, e regulation by D		STERNBERG, et al., "Bacteriophage P1 cre gene and its regulatory region. Evidence for multiple promoters and for regulation by DNA methylation," J. Mol. Biol. 187(2):197-212 (1986).	
		STILES, et al., "DNA sequence of a mutation in the leader region of the yeast iso-1-cytochrome c mRNA," Cell 25(1):277-84 (1981).	
	<u></u>	STINCHCOMB, et al., "Isolation and characterisation of a yeast chromosomal replicator," Nature 282(5734):39-43 (1979).	
		TESSMAN & PETERSON, "Isolation of protease-proficient, recombinase-deficient recA mutants of Escherichia coli K-12," Journal of Beeteriology 163(2):688-695 (1985).	
		TESSMAN & PETERSON, "Plaque color method for rapid isolation of novel recA mutants of Escherichia coli K-12: new classes of protease-constitutive recA mutants," Journal of Bacterioogy 163(2):677-687 (1985).	
		THORNE & RAINBIRD, "An in vivo technique for the study of phloem unloading in seed coats of developing soybean seeds," Plant Physiol. 72:268 (1983).	
		UMLAUF & COX, "The functional significance of DNA sequence structure in a site-specific genetic recombination reaction," EMBO J. 7(6):1845-52 (1988).	_
		VANDEKERCKHOVE, et al., "Enkephalins produced in transgenic plants using modified 2S seed storage proteins,"  Bio/Technology 7: 929-932 (1989).	
		VELTEN, et al., "Isolation of a dual plant promoter fragment from the Ti plasmid of Agrobacterium tumefaciens," EMBO J. 12: 2723-2730 (1984).	
	``	VOELKER, et al., "Differences in expression between two seed lectin alleles obtained from normal and lectin-deficient beans are maintained in transgenic tobacco," <i>EMBO J</i> 6:3571-3577 (1987).	

Examiner's	Date	<u> </u>
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information of Substitute for form 1449A/PTO	1		
	C	omplete if Known	
O INFORMATION DISCLOSURE	Application Number	09/544 045	
STATEMENT BY APPLICANT			
e   * On =	Filing Date	April 6, 2000	
CEMARK OFFICE	First Named Inventor	Brian Lee Sauer	
EMARK OFFICE	Group Art Unit	1643	
Sheet 17 of 17	Examiner Name		
Sheet 17 of 17	Attorney Docket Number		

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	ī
		WALLING, et al., "Transcriptional and post-transcriptional regulation of soybean seed protein mRNA levels," <i>Proc. Natl. Acad, Sci. USA</i> 83: 2123-2127 (1986).	
		WATERHOUSE, et al., "Combinatorial infection and in vivo recombination: a strategy for making large phage antibody repertoires," <i>Nucleic Acids Res.</i> 21(9):2265-6 (1993).	
		WIERZBICKI, et al., "A mutational analysis of the bacteriophage P1 recombinase Cre," J. Mol. Biol. 195(4):785-94 (1987).	
		WOLSWINKEL & AMMERLAAN, "Characteristics of sugar, amino acid and phophate release from the seed coat of developing seeds of <i>Vicia faba</i> and <i>Pisum sativum</i> ," J. <i>Exp. Bot.</i> 36: 359 (1985).	
		WOODCOCK, et al., "Quantitative evaluation of Escherichia coli host strains for tolerance to cytosine methylation in plasmid and phage recombinants," Nucleic Acids Res. 17(9):3469-78 (1989).	
		YAMAIZUMI, et al., "One molecule of diphtheria toxin fragment A introduced into a cell can kill the cell," Cell 15(1):245-50 (1978).	
		ZALKIN & YANOFSKY, "Yeast gene TRP5: structure, function, regulation," J. Biol. Chem. 257(3):1491-500 (1982).	
		ZHANG, et al., "Inducible site-directed recombination in mouse embryonic stem cells," <i>Nucleic Acids Research</i> 24(4):543-548 (1996).	
		ZOLOTUKHIN, et al., "A "humanized" green fluorescent protein cDNA adapted for high-level expression in mammalian cells," J. Virol. 70(7):4646-54 (1996).	

Francisco III		
Examiner's	Date	
Signature	I =	
orginature .	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

U.S.S.N.: 09/544,045 Filed: April 6, 2000 INFORMATION DISCLOSURE STATEMENT

٠.

	5,354,668	10-11-1994	Auerbach	435/91.1
	5,378,618	01-03-1995	Sternberg et al.	435/172.3
	5,434,066	07-18-1995	Bebee et al.	435/172.3
	5,441,884	08-15-1995	Baum	435/252.31
	5,478,731	12-26-1995	Short	435/91.4
	5,510,099	04-23-1996	Short et al.	424/9.2
	5,527,695	06-18-1996	Hodges et al.	435/172.3
	5,530,191	06-25-1996	Maliga	800/205
	5,539,094	07-23-1996	Reed et al.	536/23.5
	5,589,362	12-31-1996	Bujard et al.	435/69.1
	5,591,609	01-07-1997	Auerbach	435/91.2
	5,596,089	01-21-1997	Silversides et al.	536/24.3
	5,612,205	03-18-1997	Kay et al.	435/172.3
	5,614,389	03-25-1997	Auerbach	435/91.2
	5,629,159	05-13-1997	Anderson	435/6
	5,629,179	05-13-1997	Mierendorf et al.	435/91.2
	5,635,381	06-03-1997	Hooykaas et al.	435/172.3
	5,639,726	06-17-1997	Lawrence et al.	514/12
	5,641,748	06-24-1997	Hsu	514/12
_	5,641,866	06-24-1997	Reed et al.	530/387.7
<u></u>	5,643,727	07-01-1997	Reed et al.	435/6
	5,650,298	07-22-1997	Bujard et al.	435/69.7
	5,650,308	07-22-1997	Baum	435/172.3
	5,650,491	07-22-1997	Reed et al.	530/350
	5,654,168	08-05-1997	Bujard et al.	435/69.1
	5,654,182	08-05-1997	Wahl et al.	435/172.1
	5,656,438	08-12-1997	Hsu	435/7.1
	5,658,772	08-19-1997	Odell et al.	435/172.3
	5,677,177	10-14-1997	Wahl et al.	435/325
	5,679,523	10-21-1997	Li et al.	435/6
	5,686,595	11-11-1997	Reed et al.	536/23.5
	5,700,470	12-23-1997	Saito et al.	424/233.1
	5,721,118	02-24-1998	Scheffler	435/69.1
	5,721,367	02-24-1998	Kay et al.	800/2
	5,723,287	03-03-1998	Russell et al.	435/5
	5,723,333	03-03-1998	Levine et al.	435/325
	5,723,765	03-03-1998	Oliver et al.	800/205
	5,731,182	03-24-1998	Boyce	435/183
	5,733,733	03-31-1998	Auerbach	435/6
	5,733,743	03-31-1998	Johnson et al.	435/69.1
	5,733,744	03-31-1998	Hamilton	435/69.1
	5,736,377	04-07-1998	Band	435/219
	5,744,336	04-28-1998	Hodges et al.	435/172.3
	5,744,343	04-28-1998	Draetta et al.	435/193
	5,756,671	05-26-1998	Gyuris et al.	530/350

U.S.S.N.: 09/544,045 Filed: April 6, 2000 INFORMATION DISCLOSURE STATEMENT

5,763,240	06-09-1998	Zarling et al.	435/172.3
5,767,376	06-16-1998	0.11	800/205
5,770,384	06-23-1998	Androphy et al.	435/7.8
5,773,697	05-30-1998	Tomes et al.	800/205
5,776,449	07-07-1998	Baum	424/93.2
	07-07-1998	Scott et al.	
5,777,194 5,780,156	08-04-1998		800/2 435/6
5,789,156 5,792,632		Bujard et al. Dujon et al.	
	08-11-1998		435/172.3
5,792,833 5,705,736	08-11-1998	Androphy et al. Glucksmann	530/350
5,795,726 5,705,724	08-18-1998		435/7.21
5,795,734	08-18-1998 09-01-1998	Flanagan et al. Glucksmann	435/69.1
5,800,998			435/6
5,801,030	09-01-1998	McVey et al.	435/172.3
5,807,708	09-15-1998	Falb et al.	435/69.1
5,807,995	09-15-1998	Cohen et al.	530/350
5,814,300	09-29-1998	Scott et al.	424/9.1
5,814,500	09-29-1998	Dietz	435/172.3
5,814,618	09-29-1998	Bujard et al.	514/44
5,817,492	10-06-1998	Saito et al.	435/172.3
5,830,461	11-03-1998	Billiar et al.	424/94.4
5,830,698	11-03-1998	Reff et al.	435/69.1
5,830,729	11-03-1998	Jaisser et al.	435/172.3
5,834,202	11-10-1998	Auerbach	435/6
5,837,242	11-17-1998	Holliger et al.	424/436.1
5,837,844	11-17-1998	Hsu	536/23.5
5,840,540	11-24-1998	St. George-Hyslop et	
5,843,694	121-1998	Band	435/23
5,843,742	12-01-1998	Natsoulis et al.	435/172.3
5,843,744	12-01-1998	Baum	435/183
5,844,079	12-01-1998	Ingham et al.	530/350
5,849,553	12-15-1998	Anderson et al.	435/172.3
5,849,571	12-15-1998	Glorioso et al.	435/320.1
5,849,572	12-15-1998	Glorioso et al.	435/320.1
5,849,708	12-15-1998	Maratos-Flier	514/13
5,849,989	12-15-1998	Edlund	800/2
5,849,995	12-15-1998	Hayden et al.	800/2
5,851,808	12-22-1998	Elledge et al.	435/172.3
5,854,067	12-29-1998	Newgard et al.	435/366
5,858,657	01-12-1999	Winter et al.	435/6
5,859,310	01-12-1999	Bujard et al.	800/2
5,866,361	02-02-1999	Dujon et al.	435/69.1
5,866,755	02-02-1999	Bujard et al.	800/2
5,871,907	02-16-1999	Winter et al.	435/6
5,877,400	03-02-1999	Tomes et al.	800/205
5,882,888	03-16-1999	Jogensen	435/69.1

U.S.S.N.:

09/544,045

Filed:

April 6, 2000

INFORMATION DISCLOSURE STATEMENT

5,882,893	03-16-1999	Goodearl	435/69.1	
5,885,776	03-23-1999	Stone et al.	435/6	
5,885,779	03-23-1998	Sadowski et al.	435/6	
5,885,793	03-23-1999	Griffiths et al.	435/69.1	
5,885,836	03-23-1999	Wahl et al.	435/455	
5,888,732	03-30-1999	Hartley et al.	435/6	
5,888,981	03-30-1999	Bujard et al.	514/44	

## **Foreign Patent Documents**

<u>Number</u>	Publication Date	<u>Patentee</u>	Country
0 344 029 A1	11-29-1989	Plant Genetic Systems, N.V.	EP
0 332 104 A2	09-13-1989	CIBA-GEIGY AG	EP
0 337 532 A1	10-18-1989	Mogen International	EP
WO 90/11361 A1	10-04-1990	E. I. Du Pont de	PCT
		Nemours and Company	

#### **Publications**

ABREMSKI, et al., "Studies on the properties of P1 site-specific recombination: evidence for topologically unlinked products following recombination," *Cell* 32(4):1301-11 (1983).

ALVARADO-URBINA, et al., "Automated synthesis of gene fragments," *Science* 214(4518):270-4 (1981).

AMMERER, "Expression of genes in yeast using the ADCI promoter," *Methods Enzymol.* 101:192-201 (1983).

ANDRUS, Production of Seedless Watermelons, USDA Tech. Bull. No. 1425 (1971).

ANTONUCCI, et al., "Eukaryotic promoters drive gene expression in *Escherichia coli*," *J. Biol. Chem.* 264(30):17656-9 (1989).

AOKI, et al., "Efficient generation of recombinant adenoviral vectors by Cre-lox recombination *in vitro*," *Mol. Med.* 5(4):224-31 (1999).

BARKER, et al., "Cellular localization of soybean storage protein mRNA in transformed toacco seeds," *Proc. Natl. Acad. Sci.* 85:458-462 (1988).

BARNES & RINE, "Regulated expression of endonuclease EcoRI in Saccharomyces cerevisiae: nuclear entry and biological consequences," *Proc. Natl. Acad. Sci. U. S. A.* 82(5):1354-8 (1985).

U.S.S.N.:

09/544,045 April 6, 2000

Filed:

INFORMATION DISCLOSURE STATEMENT

BEACHY, et al., "Accumulation and assembly of soybean  $\beta$ -conglycinin in seeds of transformed petunia plants," *EMBO J* 4:3047-3053 (1985).

BERLIN & SAUER, "In situ color detection of alpha-L-arabinofuranosidase, a "no-background" reporter gene, with 5-bromo-3-indolyl- $\alpha$  -L-arabinofuranoside," Anal. Biochem. 243(1):171-5 (1996).

BLOCHLINGER & DIGGELMANN, "Hygromycin B phosphotransferase as a selectable marker for DNA transfer experiments with higher eucaryotic cells," *Mol. Cell. Biol.* 4(12):2929-31 (1984).

BRINK & COOPER, "The endosperm in seed development," Bot. Rev. 8:423-541 (1947).

BROGLIE, et al., "Functional analysis of DNA sequences responsible for ethylene regulation of a bean chitinase gene in transgenic tobacco," *Plant Cell.* 1(6):599-607 (1989).

CHALFIE, et al., "Green fluorescent protein as a marker for gene expression," *Science* 263(5148):802-5 (1994).

CHEN, et al., "Functional analysis of box 1 mutations in yeast site-specific recombinases Flp and R: pairwise complementation with recombinase variants lacking the active-site tyrosine," *Molecular and Cellular Biology* 12(9):3757-3765 (1992).

CHEN, et al., "Functional analysis of regulatory elements in a plant embryo-specific gene," *Proc. Natl. Acad. Sci. U. S. A.* 83(22):8560-4 (1986).

CHEN, et al., "Regulated expression of genes encoding soybean beta-conglycinins in transgenic plants," *Dev. Genet.* 10(2):112-22 (1989).

CHEN, et al., "A DNA sequence that confers seed-specific enhancement to a constitutive promoter," *EMBO J* 7(2):297-302 (1988).

COLOT, et al., "Localization of sequences in wheat endosperm protein genes which confer tissue-specific expression in tobacco," *EMBO J* 6: 3559-3564 (1987).

CORMACK, et al., "FACS-optimized mutants of the green fluorescent protein (GFP)," Gene173(1 Spec No):33-8 (1996).

CRAIG, "The mechanism of conservative site-specific recombination," Annu. Rev. Genet. 22:77-105 (1988).

DEPICKER, et al., "Nopaline synthase: transcript mapping and DNA sequence," J. Mol. Appl. Genet. 1(6):561-73 (1982).

INFORMATION DISCLOSURE STATEMENT

DIAZ, et al., "The prokaryotic beta-recombinase catalyzes site-specific recombination in mammalian cells," *J. Biol. Chem.* 274(10):6634-40 (1999).

DUNSMUIR, et al., "The major chlorophyll a/b binding protein of petunia is composed of several polypeptides encoded by a number of distinct nuclear genes," J. Mol. Appl. Genet. 2(3):285-300 (1983).

FISCH, et al., "A strategy of exon shuffling for making large peptide repertoires displayed on filamentous bacteriophage," *Proc. Natl. Acad. Sci. U. S. A.* 93(15):7761-66 (1996).

GAGNETEN, et al., "Brief expression of a GFP*cre* fusion gene in embyonic stem cells allows rapid retrieval of sire-specific genomic deletions," *Nucleic Acids Research* 25(16):3326-3331 (1997).

GOLDBERG, et al., "Regulation of gene expression during plant embryogenesis," *Cell* 56(2):149-60 (1989).

GORMAN, et al., "High efficiency DNA-mediated transformation of primate cells," *Science* 221(4610):551-3 (1983).

GORMAN, et al., "The Rous sarcoma virus long terminal repeat is a strong promoter when introduced into a variety of eukaryotic cells by DNA-mediated transfection," *Proc. Natl. Acad. Sci. U. S. A.* 79(22):6777-81 (1982).

GUO, et al., "Structure of Cre recombinase complexed with DNA in a site-specific recombination synapse," *Nature* 389(6646):40-6 (1997).

GURLEY, et al., "Upstream sequences required for efficient expression of a soybean heat shock gene," *Mol. Cell. Biol.* 6(2):559-65 (1986).

GUZMAN, et al., "Tight regulation, modulation, and high-level expression by vectors containing the arabinose PBAD promoter," *J. Bacteriol.* 177(14):4121-30 (1995).

HAGAN & GUILFOYLE, "Rapid induction of selective transcription by auxins," *Mol. Cell. Biol.* 5(6):1197-203 (1985).

HALLET, et al., "Transposition and site-specific recombination: adapting DNA cut-and-paste mechanisms to a variety of genetic rearrangements," *FEMS Microbiol. Rev.* 21(2):157-78 (1997).

HARTUNG & KISTERS-WOIKE, "Cre mutants with altered DNA binding properties," *J Biol Chem* 273(36):22884-22891 (1998).

INFORMATION DISCLOSURE STATEMENT

HENDERSON, "Effect of cultivar, polyploidy and 'reciprical' hybrodization on charcters important in breeding triploid seedless watermelon hybrids," *J. Amer. Soc. Hort. Sci.* 102:293-297 (1977).

HIGGINS, et al., "Synthesis and regulation of major proteins in seeds," *Ann. Rev. Plant Physiol.* 35:191-221 (1984).

HIGGINS, et al., "The sequence of a pea vicilin gene and its expression in transgenic tobacco plants," *Plant Mol. Biol.* 11:109-123 (1988).

HOESS, et al., "Isolation and characterization of intermediates in site-specific recombination," *Proc. Natl. Acad. Sci. U. S. A.* 84(19):6840-4 (1987).

HOESS, et al., "P1 site-specific recombination: nucleotide sequence of the recombining sites," *Proc. Natl. Acad. Sci. U. S. A.* 79(11):3398-402 (1982).

HOESS, et al., "The role of the *loxP* spacer region in P1 site-specific recombination," *Nucleic Acids Res.* 14(5):2287-300 (1986).

HOFFMAN, et al., Synthesis and protein body deposition of maize 15-kd zein in transgenic tobacco seeds," *EMBO J* 6:3213-3221 (1987).

HOFFMAN, et al., "A modified storage protein is synthesized, processed, and degraded in the seeds of transgenic plants," *Plant Mol. Biol.* 11:717-729 (1988).

*HORSCH, et al., Science, 227: 1229-1231 (1985).

HSU, et al., "Concentrations of sucrose and nitrogenous compounds in the apoplast of developing soybean seed coats and embryos," *Plant Physiol*. 75:181 (1984).

*ITO, et al., "Solid phase synthesis of polynucleotides. VI. Further studies on polystyrene copolymers for the solid support," *Nucleic Acids Res.* 10(5):1755-69 (1982).

JAYARAM, "Two-micrometer circle site-specific recombination: the minimal substrate and the possible role of flanking sequences," *Proc. Natl. Acad. Sci. U. S. A.* 82(17):5875-9 (1985).

JOHNSTON & DAVIS, "Sequences that regulate the divergent *GAL1-GAL10* promoter in *Saccharomyces cerevisiae*," *Mol. Cell. Biol.* 4(8):1440-48 (1984).

KIHARA, "Triploid Watermelons," Proc. Soc. Hort. Sci. 58:217-230 (1951).

*KILBY, et al., "Site-specific recombinases: tools for genome engineering," *Trends Genet.* 9(12):413-21 (1993).

٠,

INFORMATION DISCLOSURE STATEMENT

## KÜHN et al., "Inducible gene targeting in mice," Science 269(5229):1427-9 (1995).

LAKSO, et al., "Targeted oncogene activation by site-specific recombination in transgenic mice," *Proc. Natl. Acad. Sci. U. S. A.* 89(14):6232-6 (1992).

LEE & SAITO, "Role of nucleotide sequences of loxP spacer region in Cre-mediated recombination," *Gene* 216(1):55-65 (1998).

LIEBKE, et al., "The sequence of the distal end of the E. coli ribosomal RNA rrnE operon indicates conserved features are shared by rrn operons," *Nucleic Acids Res.* 13(15):5515-25 (1985).

MARCOTTE, et al., "Regulation of a wheat promoter by abscisic acid in rice protoplasts," *Nature* 335:454-457 (1988).

MARRIS, et al., "The 5' flnaking region of a barley B hordein gene controls tissue and developmental specific CAT expression in tobacco plants," *Plant Mol. Biol.* 10:359-366 (1988).

*MAYNARD, Hort. Sci., 24: 603-604 (1989).

MAZUR & CHUI, "Sequence of a genomic DNA clone for the small subunit of ribulose bis-phosphate carboxylase-oxygenase from tobacco," *Nucleic Acids Res.* 13(7):2373-86 (1985).

METZGER, et al., "Conditional site-specific recombination in mammalian cells using a ligand-dependent chimeric Cre recombinase," *Proc. Natl. Acad. Sci. U. S. A.* 92(15):6991-5 (1995).

MIYADA, et al., "Regulation of the araC gene of Escherichia coli: catabolite repression, autoregulation, and effect on araBAD expression," *Proc. Natl. Acad. Sci. U. S. A.* 81(13):4120-4 (1984).

MONDRAGON, "Unraveling transposition: gamma delta resolvase in complex with DNA," *Structure* 3(8):755-8 (1995).

MULLINS, et al., "Efficient Cre-lox linearisation of BACs: applications to physical mapping and generation of transgenic animals," *Nucleic Acids Res.* 25(12):2539-40 (1997).

NAITO, et al., "Differential expression of conglycinin  $\alpha$ ' and  $\beta$ ' subunit genes in trasngenic plants," *Plant Mol. Biol.* 11:683-695 (1988).

NEWBIGIN, et al., "Pea convicilin: structure and primary sequence of the protein and expression of a gene in the seeds of trasgenic tobacco," *Planta* 180:461 (1990).

INFORMATION DISCLOSURE STATEMENT

NUNES-DÖBY et al., "Similarities and differences among 105 members of the Int family of site-specific recombinases," *Nucleic Acids Res.* 26(2):391-406 (1998).

- ODELL, et al., "Identification of DNA sequences required for activity of the cauliflower mosaic virus 35S promoter," *Nature* 313(6005):810-2 (1985).
- OFFLER & PATRICK, "Cellular structures, plasma membrane surface areas and plasmodesmatal frequencies of seed coats of *Phaseolus vulgaris* L. in relation to photosynthate transfer," *Aust. J. Plant Physiol.* 11:79 (1984).
- OKAMURO, et al., Soybean seed lectin gene and flanking nonseed protein genes are developmentally regulated in transformed tobacco plants," *Proc. Natl. Acad. Sci. U. S. A.* 83(21):8240-4 (1986).
- ORAM, et al., "Recombination. Pieces of the site-specific recombination puzzle," *Curr. Biol.* 5(10):1106-9 (1995).
- PADDON & HARTLEY, "Expression of *Bacillus amyloliquefaciens* extracellular ribonuclease (barnase) in *Escherichia coli* following an inactivating mutation," *Gene* 53(1):11-9 (1987).
- PAN, et al., "Mechanism of cleavage and ligation by FLP recombinase: classification of mutations in FLP protein by in vitro complementation analysis," *Molecular and Cellular Biology* 13(6):3167-3175 (1993).
- PARSONS, et al., "Functional analysis of Arg-308 mutants of Flp recombinase," *J Biol Chem* 265:4527-4533 (1990).
- PATRICK, "Photosynthate unloading from seed coats of Phaseolus vulgaris L. control by tisue water relations," *J. Plant Physiol.* 115: 297 (1984).
- PATRICK, "Sieve element unloading: cellular pathway, mechanism and control," *Physiol. Plant* 78: 298 (1990).
- PAVLAKIS & HAMER, "Regulation of a metallothionein-growth hormone hybrid gene in bovine papilloma virus," *Proc. Natl. Acad. Sci. U. S. A.* 80(2):397-401 (1983).
- PEREZ-GRAU & GOLDBERG, "Soybean seed protein genes are regulated spatially during embryogenesis," *Plant Cell* 1:1095-1109 (1989).
- RADKE, et al., "Transformation of *Brassica napus* L. using *Agrobacterium tumefaciens*: developmentally regulated expression of a reintroduced napin gene," *Theor. Appl. Genet.* 75:685-694 (1988).

INFORMATION DISCLOSURE STATEMENT

RIGGS, et al., "Utilization of luciferase fusion genes to monitor differential regualtion of phytohemagglutinin and phaseolin promotes in transgenic tobacco," *Plant Sci.* 63:47-57 (1989).

SAMBROOK et al., Cold Spring Harbor, New York: Cold Spring Harbor Laboratory Press (Second Edition) (1989).

SANFORD, The biolistic process," *Tibtech* 6:299-302 (1988).

SANO & CANTOR, "Expression of a cloned streptavidin gene in *Escherichia coli*," *Proc. Natl. Acad. Sci. U. S. A.* 87(1):142-6 (1990).

SAUER & HENDERSON, "Cre-stimulated recombination at *lox*P-containing DNA sequences placed into the mammalian genome," *Nucleic Acids Res.* 17(1):147-61 (1989).

SAUER & HENDERSON, "Site-specific DNA recombination in mammalian cells by the Cre recombinase of bacteriophage P1," *Proc. Natl. Acad. Sci. U. S. A.* 85(14):5166-70 (1988).

SAUER & HENDERSON, "Targeted insertion of exogenous DNA into the eukaryotic genome by the Cre recombinase," *New Biol.* 2(5):441-9 (1990).

SAUER, "Functional expression of the *cre-lox* site-specific recombination system in the yeast *Saccharomyces cerevisiae*," *Mol. Cell. Biol.* 7(6):2087-96 (1987).

SAUER, "Inducible gene targeting in mice using the Cre/lox system," *Methods* 14(4):381-92 (1998).

SAUER, "Manipulation of transgenes by site-specific recombination: use of Cre recombinase," *Methods Enzymol.* 225:890-900 (1993).

SAUER, "Multiplex Cre/lox recombination permits selective site-specific DNA targeting to both a natural and an engineered site in the yeast genome," *Nucleic Acids Res.* 24(23):4608-13 (1996).

SAUER, "Identification of cryptic lox sites in the yeast genome by selection of Cremediated chromosome translocations that confer multiple drug resistance," *J. Mol. Biol.*, 223:911-928 (1992).

SAUER, et al., "Site-specific insertion of DNA into a pseudorabies virus vector," *Proc. Natl. Acad. Sci. U. S. A.* 84(24):9108-12 (1987).

SAUER, et al., "Construction of isogenic cell lines expressing human and rat angiotensin II AT1 receptors by Cre-mediated site-specific recombination," *Methods* 4:143-149 (1992).

SENECOFF & COX, "Directionality in FLP protein-promoted site-specific recombination is mediated by DNA-DNA pairing," *J. Biol. Chem.* 261(16):7380-6 (1986).

INFORMATION DISCLOSURE STATEMENT

SENECOFF, et al., "DNA recognition by the FLP recombinase of the yeast 2 mu plasmid. A mutational analysis of the FLP binding site," J. Mol. Biol. 201(2):405-21 (1988).

SENGUPTA-GOPLALAN, et al., "Developmentally regulated expression of the bean β-phaseolin gene in tobacco seed," *Proc. Natl. Acad. Sci. USA* 82:3320-3324 (1985).

SHIRSAT, et al., "Sequences responsible for the tissue specific promoter activity of a pea legumin gene in tobacco," *Mol. Gen. Genet.* 215(2):326-31 (1989).

SIGAL & ALBERTS, "Genetic recombination: the nature of a crossed strand-exchange between two homologous DNA molecules," *J. Mol. Biol.* 71(3):789-93 (1972).

SOUTHERN & BERG, "Transformation of mammalian cells to antibiotic resistance with a bacterial gene under control of the SV40 early region promoter," *J. Mol. Appl. Genet.* 1(4):327-41 (1982).

STEMMER, "DNA shuffling by random fragmentation and reassembly: in vitro recombination for molecular evolution," *Proc. Natl. Acad. Sci. U. S. A.* 91(22):10747-51 (1994).

STEMMER, "Rapid evolution of a protein in vitro by DNA shuffling," *Nature* 370(6488):389-91 (1994).

STERNBERG & HAMILTON, "Bacteriophage P1 site-specific recombination. I. Recombination between loxP sites," *J. Mol. Biol.* 150(4):467-86 (1981).

STERNBERG, et al., "Bacteriophage P1 cre gene and its regulatory region. Evidence for multiple promoters and for regulation by DNA methylation," *J. Mol. Biol.* 187(2):197-212 (1986).

STILES, et al., "DNA sequence of a mutation in the leader region of the yeast iso-1-cytochrome c mRNA," *Cell* 25(1):277-84 (1981).

STINCHCOMB, et al., "Isolation and characterisation of a yeast chromosomal replicator," *Nature* 282(5734):39-43 (1979).

TESSMAN & PETERSON, "Isolation of protease-proficient, recombinase-deficient recA mutants of Escherichia coli K-12," Journal of Bacteriology 163(2):688-695 (1985).

TESSMAN & PETERSON, "Plaque color method for rapid isolation of novel recA mutants of Escherichia coli K-12: new classes of protease-constitutive recA mutants," Journal of Bacterioogy 163(2):677-687 (1985).

`.

INFORMATION DISCLOSURE STATEMENT

THORNE & RAINBIRD, "An *in vivo* technique for the study of phloem unloading in seed coats of developing soybean seeds," *Plant Physiol*. 72:268 (1983).

UMLAUF & COX, "The functional significance of DNA sequence structure in a site-specific genetic recombination reaction," *EMBO J.* 7(6):1845-52 (1988).

VANDEKERCKHOVE, et al., "Enkephalins produced in transgenic plants using modified 2S seed storage proteins," *Bio/Technology* 7: 929-932 (1989).

VELTEN, et al., "Isolation of a dual plant promoter fragment from the Ti plasmid of Agrobacterium tumefaciens," EMBO J. 12: 2723-2730 (1984).

VOELKER, et al., "Differences in expression between two seed lectin alleles obtained from normal and lectin-deficient beans are maintained in transgenic tobacco," *EMBO J* 6:3571-3577 (1987).

WALLING, et al., "Transcriptional and post-transcriptional regulation of soybean seed protein mRNA levels," *Proc. Natl. Acad, Sci. USA* 83: 2123-2127 (1986).

WATERHOUSE, et al., "Combinatorial infection and in vivo recombination: a strategy for making large phage antibody repertoires," *Nucleic Acids Res.* 21(9):2265-6 (1993).

WIERZBICKI, et al., "A mutational analysis of the bacteriophage P1 recombinase Cre," *J. Mol. Biol.* 195(4):785-94 (1987).

WOLSWINKEL & AMMERLAAN, "Characteristics of sugar, amino acid and phophate release from the seed coat of developing seeds of *Vicia faba* and *Pisum sativum*," J. *Exp. Bot.* 36: 359 (1985).

WOODCOCK, et al., "Quantitative evaluation of Escherichia coli host strains for tolerance to cytosine methylation in plasmid and phage recombinants," *Nucleic Acids Res.* 17(9):3469-78 (1989).

YAMAIZUMI, et al., "One molecule of diphtheria toxin fragment A introduced into a cell can kill the cell," *Cell* 15(1):245-50 (1978).

ZALKIN & YANOFSKY, "Yeast gene TRP5: structure, function, regulation," J. Biol. Chem. 257(3):1491-500 (1982).

ZHANG, et al., "Inducible site-directed recombination in mouse embryonic stem cells," *Nucleic Acids Research* 24(4):543-548 (1996).

ZOLOTUKHIN, et al., "A "humanized" green fluorescent protein cDNA adapted for high-level expression in mammalian cells," *J. Virol.* 70(7):4646-54 (1996).

INFORMATION DISCLOSURE STATEMENT



### Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicants invite the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicants are of the opinion that their claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,

Robert A. Hodges Reg. No. 41,074

Dated: February 12, 2001

ARNALL GOLDEN & GREGORY, LLP 2800 One Atlantic Center 1201 West Peachtree Street Atlanta, Georgia 30309-3450 (404) 873-8796 (404) 873-8797 (fax) U.S.S.N.: Filed:

09/544,045 April 6, 2000

INFORMATION DISCLOSURE STATEMENT



# Certificate of Mailing under 37 C.F.R. § 1.8(a)

I hereby certify that this Information Disclosure Statement, along with any paper referred to as being attached or enclosed, is being deposited with the United States Postal Service on the date shown below with sufficient postage as first-class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Kimberly L. Adams

Date: February 12, 2001